"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

AUTHORS: Samoylovich, M. A., Barkan, A. B., Ravdel', B. A. 64-58-2-10/16

TITLE: The Selection of Rational Feeding Automation for Pyrites Furnaces (Vybor ratsional'noy skhemy avtomatizatsii pitaniya kolchedannykh pechey)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 2, pp. 49-50 (USSR)

ABSTRACT: In the investigations for obtaining the necessary gas concentration and temperature at the output of the furnace it was found that a complete readjustment of feeding is necessary. The following demands must be met by the feeding apparatus to be constructed: It must be standardized and produced in series. A widely variable filling interval for pyrite must exist which operates without using the dosing apparatus not acknowledged by industry. The plant must be capable of operating in a very dusty atmosphere and is to have a minimum number of contact elements in its regulation scheme. The constructions in use at present as well as a design by the Giprotsvetmet Institute did not meet these demands. In the Giprokhim branch consequently a scheme was elaborated in which the regulation system has practically no con-

Card 1/3

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tact elements at all. From the mentioned schematic representations can be seen that the feeding mechanism is operated by a P N Z-290-type motor which has a standard magnetic contactor D N -1122-12A2 for connection. The regulation apparatus is an electropotentiometer with a pneumatic isodromic system arrangement of the E P D -32-type, while the a thermocouple of the TXA-146-type or T K C-4 D -type with a special arrangement for gas purification is used corresponding to the conditions of regulation. A servo-motor of the K_3-4201 -type permanently connected with a rheostat of the PB-18-L -type serves as operating element. The latter is connected with the field winding of the motor. The d.c.source for the motor as well as for the selenium rectifier of the type ABC-100-53, connected according to the three-phase scheme, are directly connected with the 380/220 V supply. An additional rheostat of the type PB-18-L serves for the automatic regulation of the shunt resistance. Besides the cased motor and the control buttons the whole systems in a casing (figure). The use of the isodromic system arrangements is

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The Selection of Rational Feeding Automation for Pyrites Furnaces 64-58-2-10/16

explained by the few intermediate apparatus and the absence of contact elements; moreover this type of regulator has already proved valuable in the automation of sulfuric acid industry. The single parts of the described plant are produced in series and can easily be exchanged and assembled. The scheme of arrangement can be used for the automatic dosing in other technologic processes: then the regulation can be adjusted according to the specific weight, the concentration of hydrogen ions etc.
There are 2 figures and 4 references, all of which are Soviet.

AVAILABLE: Library of Congress

1. Furnaces--Operation 2. Pyrites--Handling 3. Furnace equipment --Control systems 4. Control systems--Operation

Card 3/3

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, M.A.; BARKAN, A.B.; RAVDEL', B.A.

Choosing an efficient system of automatic feeding of pyrite furnaces. Khim. prom. no.2:113-114 Mr '58. (MIRA 11:5)
(Pyrites) (Smelting furnaces)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 10673-65 EWT(m)/EWP(e)/EWP(b) Pq-4 AFWL/RAEM(c)/AS(mp)-2/ASD(a)-5/
RAEM(i)/SSD/ESD(gs)/ESD(t)/IJP(c) JD/WH

ACCESSION NR: AP4044278 S/0192/64/005/004/0630/0631

AUTHOR: Novozhilov, A. L.; Samoylovich, M. L.; Tsinober, L. I.

TITLE: Short lived paramagnetic centers in germanium doped quartz

SOURCE: Zhurnal strukturnoy khimii, v. 5, no. 4, 1964, 630-631

TOPIC TAGS: quartz, electron paramagnetic resonance, germanium, unpaired electron, x ray irradiation, γ ray irradiation, germanium doped quartz

ABSTRACT: Germanium doped quartz, irradiated with x-rays or γ-rays produces an EPR spectrum due to unpaired electrons. In addition to EPR spectrum, resulting from the alkali centers a spectrum is observed which consists of six lines. Their intensity decreases with time. When the temperature of the specimen is lowered to 77 K it is possible to resolve the fine structure consisting of 10 lines, which may be explained by the interaction of electron from an alkali center with the nucleus of Ge^{73} isotope. Since splitting is much less than for free germanium atom in the ground state one might conclude that the captured

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ACCESSION NR: AP4044278

electron spends the majority of time near the oxygen atoms which surround germanium ion. In this work a study was made of the amplitude of the EPR signal as a function of irradiation dose. In the course of 24 hours the amplitude decreases by a factor of 2. The EPR spectrum completely disappears due to heating of the sample to 250C and also after u. v. irradiation. It was found that the rate of disintegration of alkali centers is significantly dependent on the temperature. If at room temperature complete decomposition of centers required several days, at 523 K it requires only several minutes and at 77 K decomposition does not take place at all. Two probable mechanisms are proposed for decomposition of these centers: (1) recombination of electrons with holes which are produced during irradiation of crystals; (2) transition of unstable centers into stable alkali centers due to diffusion of the compensating alkali metal ions. In addition to the above two spectra another spectrum is detected in germanium doped quartz at 77 K. It has no hyperfine structure with $g_{11} = 1.993 \pm 0.002$ and $g_{\perp} = 1.996 \pm 0.002$. Orig. art. has: 3 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteza mineral'

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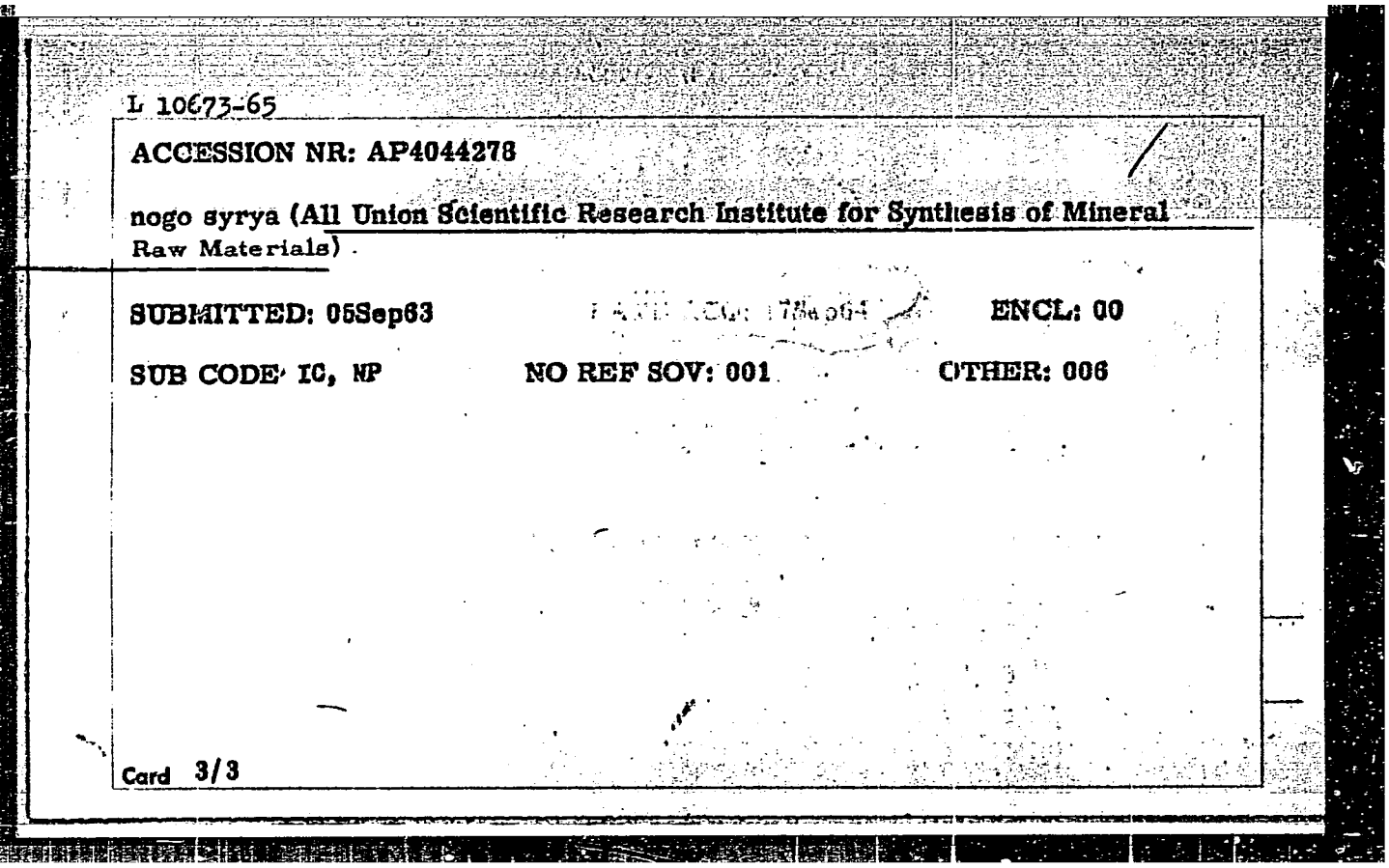

L 10673-65

ACCESSION NR: AP4044278

nogo syrya (All Union Scientific Research Institute for Synthesis of Mineral Raw Materials).

SUBMITTED: 05Sep63 ENCL: 00

SUB CODE: IC, MP NO REF SOV: 001 OTHER: 006

Card 3/3

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 63543-65 EWT(1)/EWP(e)/EWT(m)/EPF(c)/EWP(t)/EPA(w)-2/EWA(m)-2 Pz-6/
Pi-4 IJP(c) WW/GG/AT/WH
ACCESSION NR: AP5016915 UR/0192/65/006/003/0461/0463
538.113

AUTHOR: Samoylovich, M. I.; Novozhilov, A. I.

TITLE: Electron spin resonance in irradiated topaz 21 15

SOURCE: Zhurnal strukturnoy khimii, v. 6, no. 3, 1965, 461 - 466

TOPIC TAGS: topaz, spectrum spin resonance, ESR spectrum, irradiated topaz

ABSTRACT: Several varieties of Volyn topaz were studied by means of electron spin resonance spectra at 77 and 295K. In all natural blown topaz varieties as well as in samples irradiated with X or gamma rays, the ESR spectrum shows a broad isotropic line with g = 1.982 ± 0.002 and half-width at 75° with a complex hyperfine structure HFS. The intensity and number of the HFS lines depend on the orientation of the crystal in the magnetic field (see Fig I of the Enclosure). This spectrum is related to the brown color produced by irradiating colorless samples. The spectral line intensity and optical density at first increase symbatically in proportion to the dose, then become saturated at total doses of about 10^6 roentgen. Both the color and ESR spectrum disappear when the samples are

Card 1/3

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 63543-65

ACCESSION NR: AP5016919

heated to 300C. The observed ESR spectrum is described mathematically in terms of the mechanism of W. C. Holton and H. Blum (Phys. Rev., 125, 89, 1962). "In conclusion, the authors express their appreciation to A. A. Shaposhnikov, S. V. Grum-Grzhimaylo, and Yu. V. Pogodin for providing the topaz samples." Orig. art. has: 2 figures and 2 formulas. [08]

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteza mineral'nogo syr'ya, Aleksandrov (All-Union Scientific Research Institute for the Synthesis of Inorganic Raw Materials)

SUBMITTED: 08Oct64 ENCL: 01 SUB CODE: IC NP

NO REF SOV: 001 OTHER: 008 ATD PRESS: 4049

Card 2/3

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 63543-65

ACCESSION NR: AP5016915 ENCLOSURE: 01

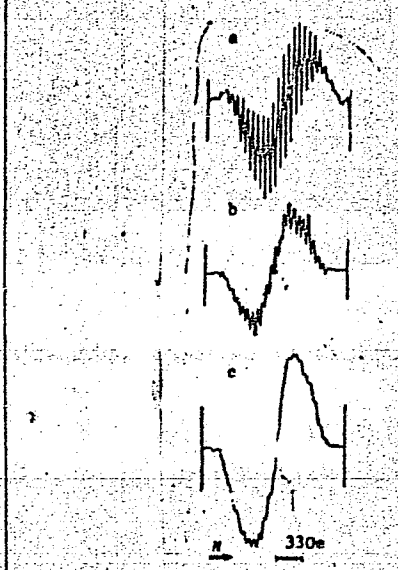

Fig. 1. ESR spectrum of irradiated topaz

a - External magnetic field parallel to axis a of the crystal; b - sample turned 7° about (010) axis; c - sample turned 15° about (010) axis.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 63617-65 EWT(l)/EWT(m)/EPF(c)/T/EWP(t)/EWP(b)/EWA(c) Pi-4 IJP(c) JD/WW/JG/GG

ACCESSION NR: AP5016920 UR/0192/65/006/003/0464/0465 33 32 B
538.113

AUTHOR: Kurkin, I. N.; Potkin, L. I.; Samoylovich, M. I.; Shekun, L. Ya.

TITLE: Electron spin resonance of neodymium in scheelite calcium molybdate structures

SOURCE: Zhurnal strukturnoy khimii, v. 6, no. 3, 1965, 464-465

TOPIC TAGS: neodymium, powellite, scheelite, electron spin resonance, ESR spectrum, calcium molybdate, Stark effect

ABSTRACT: ESR spectra of neodymium incorporated in single crystals of artificial $CaMoO_4$ (powellite) were recorded at 4.2K at a frequency of about 10 KMc. The angular dependence of the spectrum showed that all Nd^{3+} ions are magnetically equivalent. The neodymium content of $CaMoO_4$ crystals was approximately two orders of magnitude less than its amount in the initial mixture. The line width was about 3 Oe. No paramagnetic impurities other than Nd^{3+} were found. The position of the ESR lines of Nd^{3+} is described by the usual axial spin Hamiltonian, whose constants are tabulated with corresponding values for $CaWO_4$ and $PbMoO_4$. When Pb is substituted for Ca, the anionic MoO_4 groups being the same, the g tensor undergoes a considerable change (due to the change in g_{11}). Conversely, the substitution of MoO_4 for WO_4, the divalent cation

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L 63617-65
ACCESSION NR: AP5016920

being the same, causes very little change in the g tensor. It is concluded that the paramagnetic centers studied were formed as a result of the substitution of neodymium for Ca and Pb ions. The authors express the hope that a systematization of the ESR data on impurity ions in scheelites will aid in the formulation of a theory for the crystalline Stark effect in these structures. Orig. art. has: 1 table.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan State University)

SUBMITTED: 28Oct64 ENCL: 00 SUB CODE: SS, NP

NO REF SOV: 003 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, M.I.; NOVOZHILOV, A.I.

Electron paramagnetic resonance in an irradiated topaz. Zhur. struk. khim. 6 no.3:461-463 My-Jo '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteza mineral'nogo syr'ya g. Aleksandrov.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 10570-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) LJP(c) JD/WW/JG/GG
ACC NR: AP5025394 SOURCE CODE: UR/0181/65/007/010/3105/3106

AUTHOR: Antipin, A. A.; Kurkin, I. N.; Potkin, L. I.; Samoylovich, M. I.; Shekun, L. Ya.

ORG: Kazan State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: Electron paramagnetic resonance of trivalent neodymium in barium tungstate

SOURCE: Fizika tverdogo tela, v. 7, no. 10, 1965, 3105-3106

TOPIC TAGS: neodymium, barium compound, tungstate, EPR spectrum, crystal, magnetic anisotropy

ABSTRACT: The authors studied electron paramagnetic resonance in $BaWO_4:Nd^{3+}$ specimens containing 0.05% neodymium. The crystals were grown from a molten salt solution. The spectral lines for the trivalent lanthanon ion in these crystals are given for orientations of $\theta = 0°$, where θ is the angle between the magnetic field and crystal axis c. A comparison of these experimental data with theoretically calculated resonance fields shows a divergence of no more than 15 oersteds. Data

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L 10570-66

ACC NR: AP5025394

from electron paramagnetic resonance measurements of trivalent neodymium in $CaWO_4$, $PbMoO_4$ and $BaWO_4$ lattices indicate magnetic centers of a single type. However, the degree of change in anisotropy is much greater in barium tungstate than that observed for the same ion in the homologous fluorite series. Orig. art. has: 1 figure.

SUB CODE: 07,20/ SUBM DATE: 26Apr65/ ORIG REF: 002/ OTH REF: 003

Card 2/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 15731-66 EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD/JG

ACC NR: AP6000892 SOURCE CODE: UR/0181/65/007/012/3688/3688

AUTHORS: Dernov-Pegarev, V. F.; Stepanov, V. G.; Zaripov, M. M.; Samoylovich, M. I.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvenny universitet)

TITLE: Investigation of EPR of Mn^{2+} ions in single crystal $ZnMoO_4$

SOURCE: Fizika tverdogo tela, v. 7, no. 12, 1965, 3688

TOPIC TAGS: zinc compound, molybdenum compound, epr spectrum, angular distribution, paramagnetic ion, spectral line, single crystal

ABSTRACT: The $ZnMoO_4$ were grown by the hydrothermal synthesis method. Investigation of the EPR spectrum at room temperature with a video spectroscope at 8 mm wavelength, disclosed a spectrum due to the divalent manganese and weaker lines of Cr^{3+} ions. The Cr^{3+} spectrum could not be investigated in detail because its lines overlapped the

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L 15731-66

ACC NR: AP6000892

more intense lines of Mn^{2+}, which contaminated the crystals. The angular dependence of EPR spectrum indicates that the symmetry of the crystalline field acting on the Mn^{2+} ions is not higher than rhombic, so that the spectrum can be described with the spin Hamiltonian of the rhombic system, for which the constants are given. The orientation of the z axis of Mn^{2+} in $ZnMoO_4$ coincides with the orientation obtained for Mn^{2+} in $CdWO_4$. Authors thank Ye. A. Pobedimskaya for the goniometric measurements. Orig. art. has: 1 formula.

SUB CODE: 07/ SUBM DATE: 14Jul65/ OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 9437-66 EWT(m)/EWP(b)/EWP(e)/EWP(t) IJP(c) JD/WH

ACC NR: AP6000533 SOURCE CODE: UR/0070/65/010/006/0879/0883

55 53 B

AUTHOR: Tsinober, L. I.; Samoylovich, M. I.; Gordiyenko, L. A.

ORG: none

TITLE: Certain properties of smoke-tinting in aluminum- and germanium-doped quartz crystals

SOURCE: Kristallografiya, v. 10, no. , 1965, 879-883

TOPIC TAGS: quartz, aluminum, germanium, smoked quartz, color center, quartz crystal, crystal growing

ABSTRACT: Certain special properties of smoked color centers in aluminum- and germanium-doped synthetic quartz crystals irradiated with ionizing radiation are discussed on the basis of a system for the interaction between the centers of two dopants proposed elsewhere (A. Halperin, J. E. Ralph, J. Chem. Phys., 39, 1, 63-73, 1963; J. H. Mackey, J. Chem. Phys. 39, 1, 74-83,1963). The center conversion model shown in Fig. 1 was used in the study. The experimental results, which confirmed the assumptions of Halperin, Ralph, and Mackey, indicate the following. 1) If the crystals are grown from a natural "mixture" (i.e., aluminum-containing quartz), the introduction of a germanium impurity into the matrix ensures the formation of a sufficiently high concentration of potential (smoke) color centers in the germanium-absorbing aluminum pyramids <r> and <R>. 2) Contrary to results

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obtained elsewhere (A. J. Cohen, E. S. Hodge, J. Phys. Chem. Solids, 7, 4, 1958), the pyramids of pinacoid edges <c> in germanium-doped crystals remained uncolored

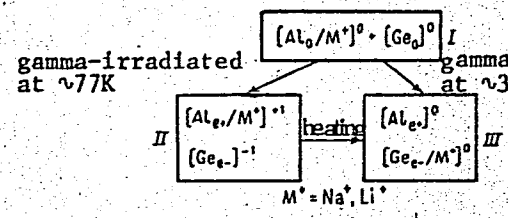

Fig. 1. Color center conversion model

or were colored only slightly, as is the case with quartz crystals grown without the germanium impurity. The absorption of the germanium by the edge c has essentially no effect on the capture coefficient for aluminum and remains very low for conventional quartz crystals. 3) Paramagnetic centers, which are not connected with the alkali metal ions and are stable only at low temperatures, form, along with stable Ge-centers, in irradiated Ge-doped quartz, thus confirming earlier assumptions (A. I. Novozhilov, M. I. Samoylovich, L. I. Tsinober, Zh. structur. khimii, 5, 4, 630, 1964). At room temperature an unstable absorption band formed in the c-crystal around 290 millimicrons and the unstable Ge-centers decayed within a 4-day period. These bands were not observed in previous measurements (L. I. Tsinober, Trudy II All-Union Conference on Radiation Chemistry. Izd-vo AN SSSR,

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ACC NR: AP6000533

677-682, 1962) because of the prolonged period between irradiation and observation. 4) (Smoke) color-centers in Ge-doped crystals are formed at smaller doses than is the case in crystals without germanium, and their density, measured in the saturation region, is approximately proportional to the amount of aluminum impurities in a crystal and is totally independent of the concentration of Ge. 5) The accepted color-center model was checked by using the capacity of the quartz to free itself from the aluminum impurity during the edge growth. A series of experiments carried out for the purpose of growing high-purity quartz involved the use of <c>-crystal pyramids of synthetic aluminum-free quartz as the "mixture." The experimentally synthesized crystals, irradiated by 4×10^7 roentgens, were compared with crystals grown on the natural "mixture" and irradiated by 5×10^6 roentgens. The results confirmed the accuracy of the existing ideas about the relationship between smoke color centers and aluminum impurities. Orig. art. has: 4 figures.

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SUB CODE: 20/ SUBM DATE: 02Jun65/ ORIG REF: 003/ OTH REF: 006/ ATD PRESS: 4154

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 42887-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6020384 (A) SOURCE CODE: UR/0192/66/007/001/0109/0110

AUTHOR: Samoylovich, M. I.; Novozhilov, A. I.; Dernov-Pegarev, V. F.; Potkin, L. I.

ORG: All-Union Scientific Research Institute of Synthesis of Mineral Raw Materials, Aleksandrov (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteza mineral'nogo syr'ya)

42
41
B

TITLE: Electron spin resonance of Mn^{2+} in molybdates of scheelite structure

SOURCE: Zhurnal strukturnoy khimii, v. 7, no. 1, 1966, 109-110

TOPIC TAGS: manganese, EPR spectrum, molybdate, calcium compound, cadmium compound

ABSTRACT: The ESR spectrum of Mn^{2+} was studied in single crystals of artificial $CaMoO_4$ and $CdMoO_4$ (both of scheelite structure) at 9.4 Mc at room temperature. Some measurements were made at the temperature of liquid nitrogen. The spin-Hamiltonian constants describing the ESR spectra of Mn^{2+} in these compounds are tabulated, and compared with those for scheelite. It is noted that the replacement of the anionic groups has practically no effect on the g factor; however, the latter does change slightly when the cations are replaced, the anion being the same. The spin-Hamiltonian constant describing the effect of the intracrystalline field of cubic symmetry changes with the anionic groups, but remains virtually unchanged when the cations are replaced. Constant b_2^0, which describes the effect of the intracrystalline field of tetragonal symmetry (the axis of symmetry coincides with the z axis), changes markedly

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L 42887-66
ACC NR: AP6020384

with any replacements. For all the crystals, $b_4^4 \approx 10b_4^0$, i. e., the surroundings of Mn^{2+} are other than cubic. The ESR spectrum of Mn^{2+} in $CdMoO_4$ shows lines due to the forbidden transitions $\Delta m = \pm 1$. Authors take this opportunity to thank L. I. Tsinober for his attention to this work. Orig. art. has: 1 table and 1 formula.

SUB CODE: 20,07/ SUBM DATE: 24Apr65/ OTH REF: 003

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 21397-66 EWT(m)/T/EWP(t) IJP(c) JD/JG
ACC NR: AP6003799 SOURCE CODE: UR/0181/66/008/001/0247/0248

AUTHOR: Dernov-Pegarev, V. F.; Zaripov, M. M.; Samoylovich, M. I.; Stepanov, V. G.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: EPR of Gd^{3+} in $CdMoO_4$

SOURCE: Fizika tverdogo tela, v. 8. no. 1, 1966, 247-248

TOPIC TAGS: gadolinium, cadmium compound, molybdenum compound, electron paramagnetic resonance, single crystal, crystal lattice structure

ABSTRACT: The authors investigated the EPR spectrum of Gd^{3+} in single-crystal $CdMoO_4$ at a frequency ~37 Gcs and at room temperature. The single crystal was grown by the hydrothermal method and has a scheelite structure. One type of Gd^{3+} ions was observed, situated in electric fields of tetragonal symmetry (z axis parallel to the c axis of the crystal). This indicates isomorphic substitution of Gd^{3+} for Gd^{2+}. The parameters of the spin Hamiltonian are determined for this constant and are found to be in agreement with those obtained for other single crystals with scheelite structure ($CaWO_4$, $PbMoO_4$, and $SrMoO_4$). The authors thank O. I. Mar'yakhina for computer processing of the experimental data. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/ SUBM DATE: 16Jul65/ ORIG REF: 002/ OTH REF: 001

Card 1/1 UDC

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 42301-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6028679 SOURCE CODE: UR/0181/66/008/008/2336/2339

AUTHOR: Meyl'man, M. L.; Samoylovich, M. I.; Potkin, L. I.; Sergeyeva, N. I.

ORG: none

TITLE: Electron paramagnetic resonance of gadolinium in single crystals of barium molybdate

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2336-2339

TOPIC TAGS: electron paramagnetic resonance, crystal impurity, gadolinium, barium, molybdate, ionic crystal, single crystal property

ABSTRACT: This article briefly describes methods of synthesizing single crystals of $BaMoO_4$ and presents the results of investigating the electron paramagnetic resonance spectrum of impurity ions Gd^{3+} in these crystals at room temperature at a frequency of about 9.3 Gc. The parameters of the spin Hamiltonian describing the energy levels of the ions Gd^{3+} and the observed resonance spectrum are found. The data obtained are compared with results of investigating the EPR spectra of gadolinium in a series of geometrically similar molybdate crystals. An investigation of the isomorphism of ions Gd^{3+} in tetragonal molybdates revealed that the observed g-factors are low-anisotropic and identical (within limits of accuracy of the experiment) in all crystals of this group. The injection of ions Gd^{3+} occurs in the same manner, un-

Card 1/2

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like other ions of rare earths (Nd, Yd, etc.). The absence of a noticeable effect of compensating impurities on the parameters of the EPR spectrum indicates nonlocal compensation of the excess charge of the impurity ions. The authors thank V. Ya. Yershov for help in the calculations on the electron digital computer and L. I. Tsinober for his attention to this work. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 27Dec65/ ORIG REF: 005/ OTH REF: 004

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L 26742-66 EWP(e)/EWT(m) WH

ACC NR: AP6011467 SOURCE CODE: UR/0070/66/011/002/0236/0244

AUTHOR: Chentsova, L. G.; Tsinober, L. I.; Samoylovich, M. I.

ORG: Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR)

TITLE: Investigation of quartz with amethyst color

SOURCE: Kristallografiya, v. 11, no. 2, 1966, 236-244

TOPIC TAGS: quartz, color center, optic property, electron paramagnetic resonance, crystal lattice defect, heat effect

ABSTRACT: To obtain more information on the nature of the amethyst coloring of quartz, the authors investigated the morphology and certain optical and paramagnetic properties of artificial quartz with amethyst color. In addition, the EPR spectra of both synthetic and natural amethyst were determined. The crystal growth procedure was described in an earlier paper (Kristallografiya, v. 4, No. 4, 633-635, 1959). The amethyst coloring was produced by bombarding the synthetic crystals with x-rays from a TRTs-3 tube at 1500 r/sec. The coloring was usually complete after 20 minutes of exposure. The effect of heating the sample to different temperatures (390, 450, 510C) was tested and it was found that the defects causing the amethyst color centers change at temperatures above 500C. The role of different chemical elements entering in the crystal and their influence on the coloring is discussed. The results point to the conclusion that the amethyst color centers are probably Fe^{3+} ions replacing the Si^{4+} ions in conjunction with various lattice defects, particularly alkaline-metal

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ions in the interstices. Other possible interpretations of the cause of the coloring are briefly mentioned. The authors thank A. I. Novoshilov for help with the measurements of the EPR spectra. Orig. art. has: 5 figures, 1 formula, and 1 table.

SUB CODE: 20/ SUBM DATE: 03Feb65/ ORIG REF: 007/ OTH REF: 021

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

ACC NR: AP6037021 (A,N) SOURCE CODE: UR/0181/66/008/011/3445/3445

AUTHOR: Zaripov, M. M.; Potkin, L. I.; Samoylovich, M. I.; Stepanov, V. G.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: Electronic paramagnetic resonance of gadolinium 3 ions in barium tungstate

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3445

TOPIC TAGS: crystal, gadolinium, ~~gadolinium~~ ion, electronic paramagnetic resonance, ~~scheelite~~, ~~monocrystal~~, barium tungstate, EPR spectrum, electric field

ABSTRACT: A study was made of the electron paramagnetic resonance spectrum in hydrothermally grown crystals containing $\sim$ 0.1% Gd^{3+} ions. In $BaWO_4$, as in earlier studied bases, one type of Gd^{3+} ions was found, occurring in an electrical field of tetragonal symmetry. Measurements of the spectrum were made at room temperature at $\lambda \sim 8$ мм. Approximate values of the parameters of hamiltonian spin, determined by the method of the perturbation theory, were

Card 1/2

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verified on an electronic computer. It was found that at $g = 1.991$ $b_1^0 = 873$ gs, $b_1^0 = 13$ gs, $b_1^1 = -113$ gs, $b_3^0 = b_3^2 = 0$. For $H \parallel z$ the position of resonance lines is described to an accuracy of ± 3 gs, and for $H \perp z - \pm 15$ gs. This provides supplementary data on the splitting of the ground state of Gd^{3+} ions by an electric field in crystals of a homologous series of scheelite. [Translation of abstract] [SP]

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Card 2/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, M.L.; CHARNYY, A.M.

Generalized candidiasis as a complication of antibiotic therapy. Sov.med. 26 no.7:125-128 Jl '62. (MIRA 15:11)

1. Iz urologicheskogo otdeleniya mediko-sanitarnoy chasti (glavnyy vrach M.L.Samoylovich) Zhdanovskogo metallurgicheskogo zavoda imeni Il'icha.
(MONILIASIS) (ANTIBIOTICS--TOXICOLOGY)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

NERETIN, A., inzhener; SAMOYLOVICH, N., inzhener.

Uniform mine schedule. Mast.ugl. 3 no.5:3-4 My '54. (MLRA 7:6)
(Coal mines and mining)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLYUK, Nikolay Diomidovich; KRAVTSOV, Konstantin Ivanovich; POPOVA, A.V., inzh., retsenzent

[Mining scraper conveyors] Zaboinye skrebkovye konveiery. Moskva, Nedra, 1964. 151 p. (MIRA 17:9)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, Naum Il'ich; POCHENKOVA, A.K., gornyy inzh., red.; OSVAL'D, E.Ya., red. izd-va; SABITOV, A., tekhn. red.

["Kommunist-Novaya" Mine, an enterprise of communist labor] Shakhta "Kommunist-Novaia" predpriiatie kommuni ticheskogo truda. Pod obshchei red. A.K.Pochenkova. Moskva, Gosgortekhizdat, 1961. 31 p. (MIRA 15:10)
(Donets Basin--Coal mines and mining)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, N.N.

Development of staphylococci resistant to antibiotics and its relation to the duration of antibiotic therapy. Antibiotiki 6 no.3:270-276 Mr '61. (MIRA 14:5)

1. Kafedra mikrobiologii (zav. N.V.Krupin) Sverdlovskogo meditsinskogo instituta.
(ANTIBIOTICS) (STAPHYLOCOCCUS)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, N.N.

Change in the sensitivity to antibiotics of pyogenic staphylococci isolated in Sverdlovsk during 1954-1958. Antibiotiki 6 no.11: 1034-1039 N '61. (MIRA 15:3)

1. Kafedra mikrobiologii (zav. N.V. Krupin) Sverdlovskogo meditsinskogo instituta.

(SVERDLOVSK--STAPHYLOCOCCUS)
(ANTIBIOTICS)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, N.N.

Change in the susceptibility of pyogenic staphylococci to certain antibiotics. Kaz. med. zhur. no.4:60-62 Jl-Ag '61. (MIRA 15:2)

1. Kafedra mikrobiologii (zav. - dotsent N.V.Krupin) Sverdlovskogo meditsinskogo instituta.
(STAPHYLOCOCCI) (ANTIBIOTICS)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

.8(0) SOV/112-59-1-698

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, pp 92-93 (USSR)

AUTHOR: Lyuter, R. A., Samoylovich, N. Ya., and Koldobskiy, M. I.

TITLE: Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

PERIODICAL: Elektrosila, Nr 15, 1957, pp 29-42

ABSTRACT: Heating of induction and synchronous motors is examined under these conditions: starting, undervoltage operation, cutting-off one phase of the synchronous motor, overload up to the limit of steady-state stability, and excitation loss. Temperature rise in °C of the starting rotor winding during the starting period is $\Theta_c = C; (1 - e^{-t_n/T_s})$, where w is the average value of losses during starting per unit surface of bars in w/cm^2; C = 20-100 degrees · cm^2/w is the heating constant of piece bars over the steel (it depends on the tightness of bar-steel contact), roughly $C \approx 50$; T_s is the time constant of bar heating for round copper bars; with C = 50, $T_s \approx 44\ d_c$ per sec, where d_c is

Card 1/7

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Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

the bar diameter in cm; $t_n = \frac{T_m M_H}{M_n K_u}$ is the starting time in seconds. (Translator's note: Apparently, the first formula is incorrectly typeset in the Russian original.) The quantity of heat evolved in the rotor over the starting period with the initial slip s of the rotating rotor is

$$Q_p = \frac{s^2}{2} T_m M_H \frac{1}{K_u} \quad \text{in kw. sec, where}$$

$T_m = \frac{27.4\ GD^2\ (n_н/100)^2}{M_H}$ is the mechanical time constant in sec;

$\frac{1}{K_u} \approx \frac{1}{1 - M_c/M_n}$; M_H is the rated motor torque in synchronous kw; $n_н$ is rated rpm; M_n and M_c are the starting torque and the resistance torque of the drive (in

Card 2/7

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Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

synchronous kw), both being functions of the slip s in the general case; GD^2 is the flywheel effect of all spinning masses in ton · m^2. In simplified calculations, under the assumption of adiabatic heating, the temperature rise over the starting period of the rotor starting winding made from copper, brass, or bronze can be computed from the formula $\Theta = 1.28 \frac{t_n M_n}{G} k_k k_b$ in ^oC where G is the starting winding weight in kg; the coefficients $k_k = 0.80\text{-}0.90$ and $k_b = 1$ for a single-cage winding; $k_k k_b = 0.60\text{-}0.75$ for a double-cage motor whose upper cage weighs G. Assuming one hot starting and two cold startings with the rotor temperature rise of $\frac{\Theta_{max}}{k_k k_b} = 250^oC$ for single-cage induction motors and 300^oC for synchronous and double-cage induction motors, the maximum starting time permissible by rotor heating conditions will be $t_{n\,max} = 195 \frac{G}{M_n}$ for single-cage induction motors and

Card 3/7

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Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

$t_{n\ max} = 2.35 \frac{G}{M_n}$ for synchronous and double-cage induction motors. On the basis of stator heating conditions, assuming a temperature rise of 35-40°C per one starting for class-A insulation windings and of 50-55°C for class-B insulation windings, the permissible starting time in seconds will be $t'_{n\ max} = \frac{7,850}{j^2_{nH}}$ for class-A insulated windings and $t'_{n\ max} = \frac{10,500}{j^2_{nH}}$ for class-B insulated windings, where j_{nH} is the initial starting current density in amp/mm^2. Estimated values of permissible starting time are between 4 and 15 sec. In 3-kv synchronous and induction motors, the starting time is limited by rotor overheating, while in 6-kv induction motors, by stator overheating. With an undervoltage and motor operation within its stable range, the permissible time of operation with the voltage 1 - p as a fraction of the rated

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Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

voltage is $t'_p = \frac{1.25}{I'^2_p - 1} t_{1.5}$ in seconds, where $t_{1.5}$ is the standard permitted 50%-current overload time (GOST 183-55 specifies 60 and 120 sec); the stator current in induction machines I'_p as a fraction of the rated current is determined, for undervoltage conditions, from the current diagram for the specified active power; in the synchronous machines the field current, as a fraction of the rated current, for undervoltage conditions, should be determined from the vector diagram for the field current. In case of a considerable undervoltage, the deceleration time of the motor is $T' = T_m \frac{M_H}{M_c - M_n/(1 - p^2 cdk)}$.

Over the time required to attain the slip s the rotor-winding temperature rise will be $\Theta'_s = 1.28 \frac{T' M_n (1 - p)^2 s^2}{G} k_k k_b$ in °C.

Card 5/7

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Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

The permissible speed drop, for undervoltage conditions, can be determined from this rule: over the deceleration time down to the slip s and over the subsequent speed-rise time on voltage recovery, the rotor-winding temperature rise should not exceed the specified value Θ_{max} in °C. Hence,

$$s = \sqrt{\frac{\Theta_{max} G}{1.28\left[T' M_n (1 - p)^2 + T_m M_H / k_u\right] k_k k_b}}.$$

When the motor is operating with one phase cutoff, its stator current is equal to the line-to-line voltage divided by the sum of positive-phase-sequence and negative-phase-sequence impedances. The time of one-phase-off operation is largely determined by heating the rotor with negative-phase-sequence currents I_2(b q/e). The quantity $A_2 = \int_o^t I_2^2 \, dt$, where t in seconds should not exceed

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Thermal Durability of Squirrel-Cage-Rotor AC Electric Machinery

120-150 for induction motors, about 60 for synchronous motors (except for 2-pole types), and about 30 for 2-pole synchronous motors. Permissible time of under-load operation of a synchronous motor on loss of field can be determined in a way similar to the undervoltage case, i.e., considering the value of stator or rotor current and the value of $t_{1.5}$.

Ye. Ya. K.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, O.A.

Data on the parasite ecology of rats in the city of Orel. Zool. zhur. 34 no.3:518-521 My-Je '55. (MLRA 8:8)

1. Orlovskiy gosudarstvennyy pedagogicheskiy institut
(Orel--Parasites) (Parasites--Rats)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, P. A. AND N. V. RUDNEV

Tekhinicheskaia eksploatatsiia i montazh pod"-emno-transportnykh mashin. Utverzhd. v kachestve uchebn. posobiia dlia vtuzov rechnogo transporta . Leningrad, Izd-vo Min. rechn. flota SSSR, 1946. 363 p. illus.

DLC: TJ1350.R8

(Technical operation and installation of hoisting and conveying machines.)

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, R.A., inzhener; OGLOBLIN, L.A., redaktor; VOLCHOK, K.M., tekhnicheskiy redaktor

[Technical operation of bridge cranes] Tekhnicheskaia eksploatatsiia portal'nykh kranov. Leningrad, Izd-vo "Morskoi transport," 1948. 192 p. [Microfilm] (MIRA 10:1)
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, Platon Aleksandrovich; Pavlov, N.G., redaktor; MELEYEV, A.S., redaktor izdatel'stva; TIKHONOVA, Ye.A., tekhnicheskiy redaktor

[Technical operation and maintenance of hoisting and conveying machinery] Tekhnicheskaia ekspluatatsiia i montazh pod"emno-transportnykh mashin. Izd. 2-oe, perer. i dop. Moskva, Izd-vo "Morskoi transport." 1955. 345 p. (MIRA 9:8)

(Hoisting machinery (Conveying machinery)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

LANG, A.G.; MAZOVER, I.S.; GRIGORUK, Ye.S., retsenzent; ANTOKOL'SKIY, L.S., inzhener, nauchnyy sotrudnik, retsenzent; SAMOYLOVICH, P.A., dotsent, nauchnyy redaktor; KAPLAN, M.Ya., redaktor izdatel'stva; PUL'KINA, Ye.A., tekhnicheskiy redaktor

[Construction gantry cranes; layout, operation and assembly] Stroitel'nye krany; ustroistvo, obsluzhivanie i montazh. Leningrad, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 190 p. (MLRA 9:12)

1. Zamestitel' nachal'nika Upravleniya Dneprostroya (for Grigoruk)
2. Leningradskiy filial Vsesoyuznogo Nauchno-issledovatel'skogo instituta Stroydormasha (for Antokol'skiy).
(Cranes, derricks, etc.)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, P., inzhener.

Modern gantry cranes in west European ports. Mor.flot 16 no.6:29-32 Je '56. (MIRA 9:9)
(Europe, Western--Cranes, derricks, etc.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

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SAMOYLOVICH, P. A. Cand Tech Sci -- (diss) "Technical Operation and assembly of hoisting and conveying machines." Len, 1957. 8 pp 20 cm. (Min of the River Fleet RSFSR. Len Inst of Engineers of Water Transport).

(KL, 8-57, 109)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, P.A., kand.tekhn.nauk, dotsent

Crane jibs with hinge-joints relieved from twisting. Trudy LIVT no.4:8-17 '60. (MIRA 15:3)
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

ANAN'YEV, A.A.; GOKHBERG, M.M.; DUKEL'SKIY, A.I., prof., doktor tekhn. nauk; LANG, A.G.;MAYZEL', V.S.; MEKLER, A.G.; SIROTSKIY, V.F.; KOGAN, I.Ya., kand. tekhn. nauk, retsenzent; REYNGOL'DT, Yu.A., kand. tekhn. nauk, retsenzent; SAMOYLOVICH, P.A., kand. tekhn. nauk, red.

[Reference book on cranes] Spravochnik po kranam. Pod red. A.I.Dukel'skogo. Moskva, Mashgiz. Vol.1. [General design, materials, drives, metal constructions] Obshchie raschety, materialy, privody, metallicheskie konstruktsii. By A.A.Anan'ev i dr. 1961. 455 p. (MIRA 14:11)
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

ANAN'YEV, A.A.; LANG, A.G.; MAZOVER, I.S.; NIKOLAYEVSKIY, G.M.; PYASETSKIY, V.V.; DUKEL'SKIY, A.I., prof., doktor tekhn. nauk, red.; KOGAN, I.Ya., kand. tekhn. nauk, retsenzent; BAZANOV, A.F., inzh., retsenzent; SAMOYLOVICH, P.A., kand.tekhn. nauk,red.; VASIL'YEVA,V.P.,red.izd-va; PETERSON,M.M.,tekhn.red.

[Handbook on cranes]Spravochnik po kranam. Pod red. A.I.Dukel'-skogo. Moskva, Mashgiz. Vol.2.[Crane mechanisms, their units and parts]Kranovye mekhanizmy, ikh uzly i detali. [By] A.A.Anan'ev i dr. 1962. 351 p. (MIRA 15:8)
(Cranes, derricks, etc.)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

ALEYNER, A.L.; ANAN'YEV, A.A.; KOGAN, I.Ya.; LANG, A.G.; NIKOLAYEVSKIY, G.M.; PLAVINSKIY, V.I.; SAMOYLOVICH, P.A.; GORBACHEV, A.I., inzh., retsenzent; DUKEL'SKIY, A.I., prof., doktor tekhn. nauk, red.; SKOMOROVSKIY, R.V., kand. tekhn. nauk, red.; MITARCHUK, G.A., red.izd-va; VASIL'YEVA, V.P., red.izd-va; SPERANSKAYA, O.V., tekhn. red.

[Handbook on cranes] Spravochnik po kranam. Pod red. A.I. Dukel'skogo. Moskva, Mashgiz. Vol.3. [Characteristics of cranes, maintenance and installation] Kharakteristiki kranov, tekhnicheskaia ekspluatatsiia i montazh. 1963. 340 p. (MIRA 16:8)

(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S. (Kaluga)

Investigation is not over... Nauka i zhizn' 28 no.12:106 D '61. (MIRA 15:2)
(Tsiolkovskii, Konstantin Eduardovich, 1857-1935)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

BODROV, I.; GUROV, S.; SAMOYLOVICH, S.; KHROMINENKOV, N.; YERSHOVA, I., red.; IVANOV, N., tekhn. red.

[Our fellow countrymen and outstanding scientists and engineers] Nashi zemliaki - vydaiushchiesia deiateli nauki i tekhniki; v pomoshch' slushateliam narodnykh universitetov kul'tury. [By] I. Bodrov i dr. Kaluga, Kaluzhskoe knizhnoe izd-vo, 1962. 95 p. (MIRA 16:8)

(Scientists)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S.D.

Conveyer transportation of charge materials in blast furnace plants. Metallurg 8 no.2:6-9 F '63. (MIRA 16:2)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.
(Blast furnaces—Equipment and supplies)
(Conveying machinery)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S.D.

Mechanized storehouses of raw materials for blast furnaces and sintering plants. Metallurgy 8 no.6:4-7 Je '63. (MIRA 16:7)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.
(Blast furnaces—Equipment and supplies)
(Sintering—Equipment and supplies)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S.D., inzh.

Metallurgical plants. Mekh. i avtom. proizv. 17 no.6:8-12 Je '63. (MIRA 16:7)

(Metallurgical plants--Equipment and supplies)
(Materials handling)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

BURMISTROV, P.I.; SAMOYLOVICH, S.D.; DEMICHEV, G.M.; KONONOV, V.A.; EVENCHIK, S.D.; BRODOVSKIY, N.R.; PAVLOV, S.M.; BOBROV, A.A.; BASKIN, A.I.; SHKOL'NIKOV, S.A.; VASIL'YEV, B.K.; DRANNIKOV, A.B.; RIKMAN, M.A.; BURAKOV, V.A.; VLADIMIROV, A.P.; NIKOLAYEVSKIY, G.M.; PETRUSHEV, I.M., red.; GERASIMOVA, Ye.S., tekhn. red.

[Mechanization of loading, unloading and storing operations in industrial enterprises] Mekhanizatsiia pogruzochno-razgruzochnykh i skladskikh rabot na promyshlennykh predpriiatiiakh. Moskva, Ekonomizdat, 1963. 276 p. (MIRA 17:2)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

AUTHOR: Samoylovich, S. R. SOV/20-120-3-55/67

TITLE: On the Problem of the Modification of the Vegetative Cover of the West Balkans in the Upper Tertiary Age (K voprosu ob izmeneniyakh rastitel'nogo pokrova zapadnykh Balkan v verkhnetretichnoye vremya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp. 637-640 (USSR)

ABSTRACT: The palinological investigations concerning Upper Miocene and Pliocene sediments, which were conducted by the author in Albania in 1957, form the material of the present paper. In spite of their sparseness (160 samples) the results are interesting as no larger fossil plant remains from the West of the Balkan peninsula (Balkanskiy poluostrov) have hitherto been investigated. Figure 1 shows the distribution of the pollen of various living forms and of characteristic families and species. Figure 2 shows the distribution of the pollen of various plant groups in the said sediments. The following dark conifers were to a considerable extent present in the Upper Miocene age: Tsuga, Abies, Picea, Cedrus cf. deodara, furthermore, mesophilic foliaceous trees:

Card 1/4

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

On the Problem of the Modification of the Vegetative Cover of the West Balkans in the Upper Tertiary Age

Fagus cf. orientalis, Quercus cf. robur, Carpinus cf. betulus, Ulmus cf. laevis and others. Pollen of evergreens and sclerophyll plants are very rare. In the Lower Pliocene age pollen of conifers are abundant, mainly of various Pinus species with admixtures of Cedrus cf. atlantica. No important rôle is now played by the dark conifers. Some horizons are rich in pollen of various Alnus species. A certain percentage of evergreens: Pistacia, Rhus, Oleacae are found. Herbaceous plants are rare. A rapid increase of the amount of pollen of herbaceous plants, is a particularity of the Astian stage of the Pliocene age, in particular of Chenopodiaceae. The mentioned evergreens, in particular Oleacae altogether reach from 20 - 30 %. The east part of the country, which even then was mountainous, was covered by unbroken forests of the mentioned conifers and foliaceous trees and formed an association of the type of the recent "beech forest zone" or "fog forest zone". The Lower Miocene forests were accompanied by an undergrowth of Myrica, Pistaciae, common holly (Ilex) in the lower sites of the moutain slopes. Open treeless spaces probably were missing. Two group arrangements

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SOV/20-120-3-55/67

On the Problem of the Modification of the Vegetative Cover of the West Balkans in the Upper Tertiary Age

prevailed in the Plaisancian stage in West Albania . 1) Widely spread pine-cedar forests (Pinus and Cedrus) with intermingling leafy trees and 2) alder thickets (Alnus), which apparently were limited to river mouths and to shores of fresh waters. In the Astian stage (astiyskoye vremya) the associations became much more varied: 1) light conifers, mainly of pines and cedars; 2) a minor rôle was played by oak trees (Quercus), hornbeam (Carpinus), walnut (Juglans) and hazelnut (Corylus) and privet (Cornus) in the undergrowth; 3) typically mediterranean tree-shrub associations of oleacees, pistacees, coarsely leafed oak trees and other draught-resistant species were widely distributed. 4) Herbaceous plant cenoses of open spaces (of the littoral zones) which had spread at the foot after the regression of the Plaisancian Sea. The spectrum of West Albania is rather similar to the recent macchia of the country. There are 2 figures and 8 references, 3 of which are Soviet.

Card 3/4

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SOV/20-120-3-55/67

On the Problem of the Modification of the Vegetative Cover of the West Balkans in the Upper Tertiary Age

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy institut (All-Union Scientific Research Institute for Geological Prospecting)

PRESENTED: March 17, 1958, by V. N. Sukachev, Member, Academy of Sciences, USSR

SUBMITTED: March 15, 1958

1. Paleoecology--USSR 2. Geological time--Determination

Card 4/4

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S.R., nauchnyy red.; MCHEDLISHVILI, N.D., nauchnyy red.; RUSAKOVA, L.Ya., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Pollen and spores of Western Siberia; Jurassic and Paleocene] Pyl'tsa i spory Zapadnoi Sibiri; IUra-paleotsen. Leningrad, Gos.nauchno-tekhn.izd-vo neft.i gorno-toplivnoi lit-ry Leningr.otd.-nie, 1961. 657 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.177). (MIRA 15:4)

1.Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut (for Samoylovich, Mchedlishvili).
(West Siberian Plain--Palynology)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S.R., MCHEDLISHVILI, N.D.

"Common floras of Meszoic and Cenozoic deposits from western Siberia and Australia."

Report to be submitted for the Intl. Conf. on Palynology Tucson, Arizona. 23-27 Apr '62.

SAMOYLOVICH, All-Union Petroleum Scientific Research Geological Prospecting Insh.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, S.R.

Age of the Lindya series. Trudy VNIGRI no.239:79-86 '65. (MIRA 18:7)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

MCHEDLISHVILI, N.D.; SAMOYLOVICH, S.R.

Relations between the floras of the Northern and Southern Hemispheres in the Mesozoic and Cenozoic. Trudy VNIGRI no.239:35-37 '65. (MIRA 18:7)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

YEFREMOV, M.G.; TER-GALUSTOV, S.A.; SAMOYLOVICH, S.Ya., nauchnyy redaktor; TOKAR, A.M., tekhnicheskiy redaktor

[Boring and cementing with clay solution for deep-set supports] Opyt bureniia i betonirovaniia pod glinistym rastvorom dlia opor glubokogo zalozheniia. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 50 p. [Microfilm] (MLRA 7:10)
(Foundations) (Boring)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

LYZLOV, Semen L'vovich; SAMOYLOVICH, T.A., red.; KLAPTSOVA, T.F., tekhn. red.

[New developments in invention and innovation in the merchant marine]Novoe v rabote po izobretatel'stvu i ratsionalizatsii na morskom flote. Moskva, Izd-vo "Morskoi transport," 1962. 49 p. (MIRA 15:9)

(Merchant marine--Technological innovations)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

KOYTIKH, Boris L'vovich; MITROKHIN, Gleb Aleksandrovich; NEMTSEV, Anatoliy Viktorovich. Prinimali uchastiye: ABRAMOV, A.G.; LEMEKHOV, L.K.; SAMOYLOVICH, T.A., red.; KLAPTSOVA, T.F., tekhn. red.

[New welding processes in ship repairs]Novye tekhnologicheskie protsessy svarki v sudoremonte. Moskva, Izd-vo "Morskoi transport," 1962. 55 p. (MIRA 15:9)
(Ships—Maintenance and repair) (Welding)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

RAKHOVETSKIY, Anatoliy Nikolayevich; BUKHANOVSKIY, I.l., kand. tekhn. nauk, retsenzent; SAMOYLOVICH, T.A., red.; TIKHONOVA, Ye.A., tekhn. red.

[Radar observations in poor visibility]Radiolokatsionnoe nabliudenie v usloviiakh plokhoi vidimosti. Moskva, Izd-vo "Morskoi transport," 1962. 96 p. (MIRA 15:11)
(Radar in navigation)
(Collisions at sea--Prevention)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

KOMANDIN, Arnol'd Grigor'yevich; MANOYLOVICH, T.A., red.

[Operation of a MAK-FV-4 freon refrigeration plant] Ekspluatatsiia freon[illegible]oi kholodil'noi ustanovki marki MAK-FV-4. Moskva, Izd-vo "Transport," 1964. 51 p. (MIRA 17:6)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

TARABRIN, Ivan Vasil'yevich; KAZAVCHINSKIY, Ya.Z., prof., doktor ekhn. nauk, retsenzent; ZAGORUYKO, V.A., inzh., retsenzent; SAMOYLOVICH, T.A., red.

[Ship air-conditioning systems] Sudovye ustanovki kondi-tsionirovaniia vozdukha. Moskva, Transport, 1964. 161 p. (MIRA 17:11)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

KORSHUNOV, Lev Petrovich; SAMOYLOVICH, T.A., red.

[Main transmissions on ships] Glavnye sudovye peredachi. Moskva, Transport, 1964. 183 p. (MIRA 17:12)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

MALAKHOV, Nikolay Dmitriyevich; POVEROV, Konstantin Iosifovich; YATSENKO, Valentin Semenovich; TUMM, I.D., retsenzent; SAMOYLOVICH, T.A., red.

[Operation of marine power plants] Tekhnicheskaia ekspluatatsiia sudovykh silovykh ustanovok. Moskva, Transport, 1964. 346 p. (MIRA 17:12)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

KATERNOGA, M. [Katernoha, M.], kand.arkhitektury; SAMOYLOVICH, V. (Samoilovych, V.], kand.arkhitektury; KOLOMIYETS, M. [Kolomiiets's, M.], kand.arkhitektury.

New standard plans for collective farm houses. Proek. i bud. 1 no.1:37-39 0 '59. (MIRA 13:12)
(Ukraine—Farmhouses)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, V. [Samoilovych, V.], kand.arkhitektury; KHOKHOL, Yu., kand. arkhitektury

House construction in the Baltic Sea Region. Sil'.bud. 13 no.5:21-23 My '63. (MIRA 17:3)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

88711

S/076/61/035/001/015/022
B004/B060

11.1120

AUTHORS: Samoylovich, V. G. and Filippov, Yu. V.

TITLE: Electrical theory of ozonizers. VIII. Effect of frequency upon the electrical characteristics of ozonizers

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 1, 1961, 201-205

TEXT: The problem of increasing the power of ozonizers by an increase of frequency is dealt with here. A report is given of the effect of frequencies between 300 and 3000 cps upon the course of the voltampere characteristics $I_m = f(V_{0_{eff}})$ for an ozonizer with a 1-mm discharge gap. ($I_m = I_{mean}$). The measurements were made on electrodes cooled down to 25°C, 600 mm Hg, the throughput rate of O_2 being 100 l/h. The frequency was obtained by means of a ЗГ-10 (ZG-10) sound generator with a ТУ-5 (TU-5) amplifier. Fig. 1 shows the v-a characteristics for the various frequencies. It was noted that a change of frequency did not cause any change of voltage V_g in the discharge gap. The critical voltage V_{cr} also

Card 1/4

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remained constant. According to Ref. 4 the v-a characteristics are described by the equations $I_m = (2/\pi)V_o C_{total}\omega$ for $V_o \leqslant \sqrt{2}V_{cr}$ (1); $I_m = (2/\pi)(V_o - V_g)C_g\omega$ for $V_o \gg \sqrt{2}V_{cr}$ (2). [Abstracter's Note: C_g is not defined]. In both cases, the course of the curves as a function of frequency was found to fit the theory. The critical current $I_{cr} = (2/\pi)C_{total}V_{cr}\omega$ is also a linear function of frequency. As regards the effective energy U of the ozonizer it is noted that measurements must be made under conditions, where U remains constant. From $U = V_g(I_m - I_{cr})$ (5) and $I_m - I_{cr} = I_a$, the active current, this was observed to be the case, when I_a = const. As is shown by the table, this has been confirmed by experiments. For I_a = const, U does not depend on the frequency. The linear relationship between $1/\eta$ and $1/\omega$ was confirmed experimentally for the power coefficient η in accordance with the theoretical findings. There are 6 figures, 1 table, and 7 references: 6 Soviet-bloc and 1

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88711

Electrical theory of ozonizers. ... S/076/61/035/001/015/022
B004/B060

non-Soviet-bloc.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: May 21, 1959

Legend to the Table. 1: U, w, for current strength: ; 2: ν, eps; 3: U_{mean}; 4: U_{calcul}

ν, гц	U, вт при силе тока 2,5 mA	5 mA	10 mA	15 mA	ν, гц	U, вт при силе тока 2,5 mA	5 mA	10 mA	15 mA
300	7,5	14,0	31	47	2500	7,6	14,1	31	47
600	7,6	14,1	28	46,5	3000	7,5	14,3	31,5	47
900	7,7	14,0	32	48,0	3 $U_{ср}$	7,6	14,1	30,8	47,0
1500	7,8	14,1	31	46,5	4 $U_{расч.}$	7,75	15,5	31,0	46,5

Card 3/4

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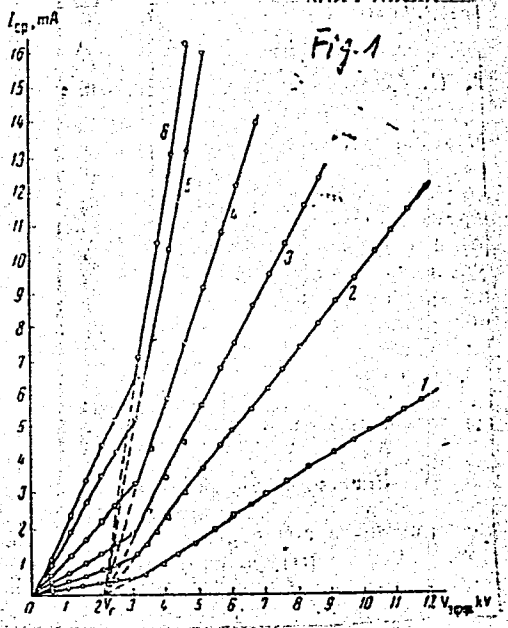
"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

88711

Electrical theory of ozonizers. ... S/076/61/035/001/015/022

Fig. 1



Legend to Fig. 1
a) I_m, ma; b) V_{eff}, kv;
1: 300 cps; 2: 600 cps;
3: 900 cps; 4: 1500 cps;
5: 2500 cps; 6: 3000 cps.

Card 4/4

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

S/189/62/000/001/001/002
D227/D302

11.1120

AUTHORS: Samoylovich, V.G. and Filippov, Yu. V.

TITLE: Mechanism and kinetics of ozone synthesis in the electric discharge

PERIODICAL: Moscow, Universitet. Vestnik. Seriya II. Khimiya, no. 1, 1962, 44-48

TEXT: In the present work the authors studied the effect of oxygen pressure and strength of current on the synthesis of ozone in a circulating system. It was first confirmed that the equilibrium ozone concentration is independent of current. The effect of pressure and rapid decrease of ozone concentration at low pressure are considered and expressions for the equilibrium ozone concentrations are given, showing that the ozone concentration is (a) independent of pressure when the latter is high and (b) proportional to the 4th power of the total pressure when the latter is low. The kinetics of ozone synthesis are represented by a first order reaction and the decomposition of ozone by Eq. (3a)

Card 1/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

Mechanism and kinetics of ...

$$\frac{[O_3]}{[O_2]}\% = 100\,\frac{K_0^0}{K_1^0}\,(1 - e^{-K_1^0 \cdot t}) \qquad (3,a)$$

where K^o_0 = constant of formation and K^o_1 = constant of O_3 decomposition. On the basis of the proposed reaction mechanism, the kinetics of ozone synthesis are described and discussed. There are 5 figures and 3 references, 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Devins, J. Electrochem. Soc. 103, no. 8, 460 (1956).

SUBMITTED: January 3, 1961

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

S/189/62/000/001/002/002
D227/D302

AUTHORS: Popovich, M.P., Samoylovich, V.G. and El'tsefon, B.S.

TITLE: A study of the silent discharge in oxygen

PERIODICAL: Moscow, Universitet. Vestnik, Seria II. Khimiya, 17 no. 1, 1962, 80

TEXT: The emission spectrum of a silent discharge in oxygen at atmospheric pressure was observed in the visible region. The usual silent discharge apparatus was used with the exception of the ozonizer which consisted of a glass cylinder with windows of optical quartz, a cooling system and flat, glass electrodes separated by 1 mm. Frequency of the applied potential was 50 c/s, the voltage 10 Kv and the current μa. The spectrum was recorded with the aid of an ИСП -28 (ISP-28) instrument, on "Ramman Platten" plates, with an exposure of 45 hrs. and an 0.008 mm slit. Spark spectra of iron were photographed on the same plate for the sake of comparison. The silent discharge spectrum thus obtained extended from 4707 to 2952 A.U. Three ozone bands at 4277, 3099, 3090 AU were found, as well as 33 bands belonging to the second

Card 1/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

S/189/62/000/001/002/002
A study of the silent discharge ... D227/D302

positive nitrogen system.

ASSOCIATION: Kafedra fizicheskoy khimii (Department of Physical Chemistry)

SUBMITTED: November 27, 1961

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

37629
S/076/62/036/005/004/013
B101/B110

11.1120

AUTHORS: Samoylovich, V. G., Vendillo, V. P., and Filippov, Yu. V.

TITLE: Electrosynthesis of ozone. V. Synthesis of ozone in a flow under reduced pressure

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 5, 1962, 989 - 992

TEXT: To clarify the kinetics of ozone formation, the synthesis of ozone was studied at reduced pressures in a device described earlier (Zavodsk. laboratoriya, 25, 1401, 1959; Zh. fiz. khimii, 33, 2358, 1959). Three ozonizers, length 250 mm, diameter 35 mm, discharge space 0.5 (1); 2.0 (2), and 4.0 mm (3) were used, the amperage in ozonizers 1 and 2 being 44.4 ma and in ozonizer 3 being 30 ma, the electrodes with water at 22.5°C, frequency 1250 cps, flow rate of oxygen $5 \leqslant V \leqslant 500$ liters/hr, pressure 160 - 780 mm Hg. At falling pressure, the curves for O_3 yield (% by volume) versus u/V showed increasingly distinct maxima (Fig. 1). It is discussed whether these maxima are caused (a) by decomposition of ozone before the ozonizer on counter-current diffusion of ozone, or (b) by decomposition of ozone after the ozonizer. The case (a) is possible since

Card 1/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

Electrosynthesis of ozone...

PV_{max} = const. has been found experimentally. For the case (b), PV_{max} = const. has also been found on the basis of the equation $dx/dt = k_1'x$ ($x = O_3$ concentration, t = time, k_1' = decomposition constant of O_3 after the ozonizer). It is assumed that in practice the two processes are... re combined. There are 3 figures and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 20, 1960

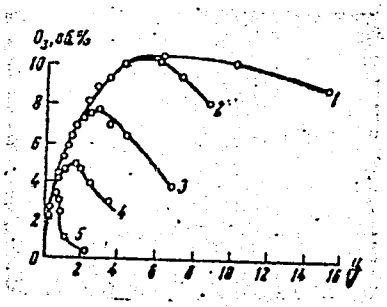

Fig. 1. Ozone concentration versus u/V for ozonizer with 0.5 mm discharge space. (1) 780 mm Hg; (2) 620 mm Hg; (3) 440 mm Hg; (4) 320 mm Hg; (5) 160 mm Hg.

Legend: Ordinate O_3, % by volume.

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

POPOVICH, M.P.; SAMOYLOVICH, V.G.; FILIPPOV, Yu.V.

Rotational temperature in the electric discharge in an ozonizer. Vest.Mosk.un.Ser.2:Khim. 19 no.4:30-32 Jl-Ag '64. (MIRA 18:8)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

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L 24789-65 EPF(c)/EPR/EWT(m)/T Pr-4/Ps-4 RPL RWH/WW/JW
ACCESSION NR: AP4049616 S/0076/64/038/011/2712/2714

24
23
B

AUTHOR: Samoylovich, V. G.; Filippov, Yu. V.

TITLE: Electrosynthesis of ozone. X. The influence of the current frequency

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 11, 1964, 2712-2714

TOPIC TAGS: ozone electrosynthesis, frequency effect, ozone generator

ABSTRACT: The increase of the frequency of the electric current was considered to be the only means for a practically unlimited increase of the production of ozone generators of a given size. In the work of other authors who studied the effect of frequency on the ozone synthesis, the discharge power, which is proportional to the frequency, was also changed. The present authors have investigated the effect of frequency only, by maintaining the power constant. Their results show that under these conditions, the frequency in the range from 300 to 3000 Hg has no effect on the synthesis of ozone. Orig. art. has: 2 figures and 1 table

Card 1/2

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L 24789-65
ACCESSION NR: AP4049616

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 30Feb63 ENCL: 00

SUB CODE: IC, GC NO REF SOV: 005 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

POPOVICH, M.P.; FILIPPOV, Yu.V.; SAMOYLOVICH, V.G.

Mean energy and distribution function of electrons in inert gases. Vest. Mosk. un. Ser. 2:Khim. 20 no. 5:8-12 S-O '65. (MIRA 18:12)

1. Kafedra fizicheskoy khimii Moskovskogo gosudarstvennogo universiteta. Submitted Sept. 21, 1964.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 35809-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6014899 SOURCE CODE: UR/0076/65/039/012/3092/3095

AUTHOR: Samoylovich, V. G.; Popovich, M. P.; Yemel'yanov, Yu. M.; Filippov, Yu. V.

60
B

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Electric theory of ozonizers. XI. Discharge in helium at various pressures and discharge gaps

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 12, 1965, 3092-3095

TOPIC TAGS: ozone, electric theory, helium, circuit design, gas discharge

ABSTRACT: The equipment used in the experiments (illustrated in a figure) consisted basically of an upper aluminum electrode with a diameter of 15 mm and a height of 50 mm and a lower aluminum electrode with a diameter of 10 mm, pressed into a base made of organic glass. The article gives also a diagram of the electric circuit. Using this equipment, measurements were made by the oscillographic method of the combustion pressure during a discharge in helium. Measurements of the combustion pressure in helium were made at gas pressures of 750, 600, 400, 200, 100, and 50 mm Hg for discharge gaps of 0.45, 1.0, 2.0, 3.0,

UDC: 541.13

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4.0, 5.0, and 7.0 mm. The value of E/p was found to remain constant and to be equal to 1.4 volts/cm-mm Hg for discharge gaps from 2 to 7 mm and for pressures not less than 200 mm Hg. An evaluation of the electron temperature gave a value of 2.7 electron volts. Orig. art. has: 5 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 23Nov64/ ORIG REF: 004/ OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

L 34377-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JW

ACC NR: AP6010743 SOURCE CODE: UR/0076/66/040/003/0531/0536

38
B

AUTHOR: Samoylovich, V. G.; Popovich, M. P.; Yemel'yanov, Yu. M.; Filippov, Yu. V.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: The electrical theory of ozonizers. XII. Burining voltage in oxygen-ozone mixtures

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 3, 1966, 531-536

TOPIC TAGS: electric theory, gas discharge, oxygen, ozone

ABSTRACT: The authors used a flat ozonizer (discharger) to measure the burning voltage of a discharge in oxygen and oxygen-ozone mixtures at various gas pressures and with various discharge intervals. The value of the field applied to the oxygen and the oxygen-ozone mixtures is determined. In order to avoid any gradient in ozone concentration, the ozone was produced externally and introduced. Discharge gaps from 0.1 to 4.0 mm were used, with pressures from 50 to 750 mm Hg. The ozone concentration was 0.65 to 7.0% by volume. The ratio of the elemental reaction constants of ozone and oxygen upon collision with electrons was determined. It was established by the experiments that the curve of the burning

 UDC: 541.13

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L 34377-66

ACC NR: AP6010743

voltage as a function of ozone concentration is linear. Orig. art. has: 6 tables, 4 figures, and 4 formulas.

SUB CODE: 07,20/ SUBM DATE: 07Dec64/ ORIG REF: 006/ OTH REF: 005

Card 2/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, V. P.

"Narodnoye tvorchestvo v arkhitekture ukrainskogo zhilishcha."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 64.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, Viktor Petrovich; KHOKHOL, Yuriy Fedorovich; GONCHAR, A.S., red.; BABIL'CHANOVA, G.A., tekhn. red.

[[Foundations, walls, partitions, and ceilings in Apartment houses with few stories] Fundamenty, steny, peregorodki i perekrytiia v maloetazhnykh zhilykh domakh. Kiev, Gos. izd-vo lit-ry po stroit. i arkhit. USSR, 1961. 120 p. (MIRA 14:9)
(Apartment houses)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, Ye.F.

Unusual case of lumphosarcomatosis. Vop. onk. 7 no.1:88-91 '61.
(MIRA 14:2)
(HODGKIN'S DISEASE)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001447010014-9

SAMOYLOVICH, Ye.N.

Gall midge injurious to black currant shoots in Leningrad Province. Ent.oboz. 34:129-130 '55. (MLRA 9:5)

1. Institut prikladnoy zoologii i fitopatologii, Leningrad.
(Leningrad Province--Gall gnats) (Currants--Diseases and pests)

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